

WHAT IS CLAIMED IS:

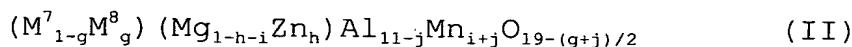
1. A phosphor for vacuum ultraviolet ray-excited light-emitting elements which comprises a compound represented by the following formula (I):



(wherein M^1 is at least one element selected from the group consisting of La, Y and Gd, M^2 is at least one element selected from the group consisting of Ce and Tb, M^3 is at least one element selected from the group consisting of Ca, Sr and Ba, M^4 is at least one element selected from the group consisting of Mg and Zn, M^5 is at least one element selected from the group consisting of Al and Ga, and M^6 is at least one element selected from the group consisting of Mn and Eu, and a , b , c , d , e and f are numbers satisfying the conditions of $0 \leq a < 1$, $0 \leq b \leq 0.6$, $0 \leq c \leq 0.5$, $0 \leq d \leq 0.5$, $0 \leq e < 1$, $0 \leq f < 1$, $a+b+c+d < 1$ and $0 < c+d+e+f$, respectively.

2. A phosphor according to claim 1, wherein c , d , e and f satisfy the condition $0.001 \leq c+d+e+f \leq 1$.
3. A phosphor according to claim 1 or 2, wherein M^4 consists of Mg and Zn.
4. A phosphor according to any one of claims 1-3, wherein M^1 consists of La and Y.
5. A phosphor according to any one of claims 1-4, wherein M^5 is Al.
6. A phosphor according to claim 1 which

comprises a compound represented by the following formula (II):



(wherein M^7 is at least one element selected from the group consisting of La, Y and Gd and M^8 is at least one element selected from the group consisting of Ca, Sr and Ba, and g , h , i and j are numbers satisfying the conditions of $0 < g \leq 0.6$, $0 \leq h \leq 1$, $0 \leq i \leq 0.5$, $0 \leq j \leq 0.5$, $h+i \leq 1$, and $0 < i+j \leq 0.5$, respectively).

7. A phosphor according to claim 1 which comprises a compound represented by the following formula (III):



(wherein M^9 is at least one element selected from the group consisting of La, Y and Gd and M^{10} is at least one element selected from the group consisting of Ca, Sr and Ba, and k , m and n are numbers satisfying the conditions of $0 < k \leq 0.6$, $0 < m \leq 0.4$, $0 \leq n \leq 1$, and $k+m < 1$, respectively).

8. A vacuum ultraviolet ray-excited light-emitting element comprising the phosphor described in any one of claims 1-7.